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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/664,507	09/18/2000	Il Won Cho	P2051	4597

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EXAMINER

HARRY, ANDREW T

ART UNIT	PAPER NUMBER
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2683

DATE MAILED: 04/10/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/664,507

Applicant(s)

CHO, II WON

Examiner

Andrew T Harry

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by ***Koster* U.S. Patent 6,259,914** (“*Koster*”). *Koster* describes a system which is to be implemented on a PCS system therefore the acronyms used by *Koster* will be different than those disclosed on the instant invention. However, the Examiner maintains that the methods implemented by *Koster* and the methods implemented by the instant invention are, in all other ways, nearly identical.

As pertaining to **claim 1**, *Koster* teaches a method for managing a foreign mobile subscriber in a visitor location register (VLR), or international roaming service home location register (IRS HLR) of a mobile switching center (MSC) to provide a roaming service (see *Koster*, abstract), comprising the steps of:

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(a) upon receipt of a call request from a mobile terminal, determining whether a subscriber of the mobile terminal is a foreign mobile subscriber by checking a mobile country code (MMC) and a mobile network code (MNC) of an international mobile subscriber identification (IMSI) number received from the mobile terminal (see *Koster*, col. 5 lines 15-51).

(b) determining whether a number of the mobile country code country for which roaming service is established by checking if the country code received from the foreign mobile subscriber exists in a country code index table of the VLR when the subscriber in step (a) is determined to be a foreign mobile subscriber (see *Koster*, col. 5 lines 52-67);

(c) determining whether the service provider of the foreign mobile subscriber is a roaming service provider by checking a service provider index table after determining that roaming service for a country of the foreign mobile subscriber is established by checking the country code identified in step (b) (see *Koster*, col. 5 lines 15-67); and

(d) providing service to the foreign mobile subscriber while managing the corresponding number in the order of the country code index table number, the service provider index table number and a mobile station identification number (MIN) after determining that the service provider of the foreign mobile subscriber is a roaming service provider identified in step (c) (see *Koster*, col. 5 lines 15-67).

As pertaining to **claim 2**, in *Koster's* method the foreign mobile subscriber's request for service is discarded when the country code of the foreign mobile subscriber does not exist in the country code index (see *Koster*, col. 6 lines 1-17).

As pertaining to **claims 3 and 4**, in *Koster's* method the country code index table comprises a table in which a prefix is comprised of the MMC and the MNC of the IMSI and the

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table has an index value corresponding to the roaming service country code (see *Koster*, col. 5 line 32 –col. 6 line 17).

As pertaining to **claims 5 and 6**, in *Koster's* method the service provider index table has an index value corresponding to a public land mobile network (PLMN) value of the IMSI value (see *Koster*, col. 6 lines 1-17).

As pertaining to **claim 7**, *Koster* teaches a method for managing data of a VLR or ISR VLR including a country code index table and a service provider index table for a roaming service of a foreign mobile subscriber in an MSC (see *Koster*, abstract), comprising the steps of:

upon receipt of country code table data and service provider index table data for the roaming service of the foreign mobile subscriber from a device connected to the MSC, checking a class of an operator from which the data is transmitted (see *Koster*, col. 4 lines 48-65); and

updating the country code index table data and the service provider index table data in the VLR, when the operator's class is an accessible class (see *Koster*, col. 4 lines 48-65).

As pertaining to **claim 8**, in *Koster's* method the country code index table comprises a table in which a prefix is comprised of MMC and MNC of the IMSI, and the table has an index value corresponding to the roaming service country code (see *Koster*, col. 5 line 32 –col. 6 line 17).

As pertaining to **claims 9 and 10**, in *Koster's* method the service provider index table has an index value corresponding to a PLMN value of the IMSI (see *Koster*, col. 6 lines 1-17).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

B. Houde et al. U.S. Patent 5,978,678 teaches a cellular telephone network routing method and apparatus for internationally roaming mobile stations.

C. Bertacchi U.S. Patent 6,097,950 teaches a method and system for global roaming in a cellular telecommunications system.

D. Krolopp et al. U.S. Patent 5,699,408 teaches an international mobile station identification method and signaling system for cellular radiotelephones and systems.

E. Wiehe U.S. Patent 6,233,457 teaches a method and mobile communication system for routing of call connections.

F. Bertrand et al. U.S. Patent 6,408,173 teaches billing ID correlation for inter-technology roaming.

G. Lee U.S. Patent 6,006,094 teaches a method of routing an international call to a foreign mobile subscriber.

H. Purcell et al. U.S. Patent 6,094,578 teaches a gateway unit.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T Harry whose telephone number is 703-305-4749. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 703-308-5318. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

ATH

April 5, 2003



WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600